

Aggregate values of all disturbances exceeding 1' 4 in the several years from 1859 to 1865 inclusive.		Ratios of disturbance in the several years from 1859 to 1864 inclusive to the mean aggregate disturbance in the six years taken as unity.	
Years.	Aggregate values.	Years.	Ratios.
1859	1532.1	1859	1.43
1860	1421.6	1860	1.33
1861	951.8	1861	0.89
1862	1240.5	1862	1.16
1863	691.1	1863	0.64
1864	595.9	1864	0.56
1865	906.8	The ratio of the maximum in 1859 to the minimum in 1864 is as 2.6 to 1.	

IV. "On the Tides of the Arctic Seas.—Part III. On the Semi-diurnal Tides of Frederiksdal, near Cape Farewell, in Greenland. By the Rev. S. HAUGHTON, F.R.S. Received April 12, 1866.

(Abstract.)

The observations discussed in this paper by the Rev. Dr. Haughton were made for him (in 1863–64), at the request of Admiral Irminger of the Royal Danish Navy, by Missionary Asboe, at Frederiksdal, near Cape Farewell in Greenland.

They proved amply sufficient for the complete discussion of the semi-diurnal tide of that interesting locality; and the following results were obtained :—

1. Eccentricity of lunar orbit..... 0.06786
2. Mass of earth as compared with mass of moon.... 64.638
3. Depth of Atlantic deduced from heights 10.03 miles.
4. Depth of Atlantic deduced from times 3.30 miles.